mlwsurfaces

ORVAL LIMESTONE

INSTALLATION, CLEANING & CARE GUIDE

Natural Limestone - Sandblasted & Brushed (Antique) Finish

Orval Limestone is a natural limestone. Variation in color, tone, grain, texture, fossil markings, small pits, open pores and other naturally occurring features
should be expected. These are inherent characteristics of natural stone.

ABOUT THE FINISH

The sandblasted and brushed process creates a softly textured, aged surface and exposes the natural grain. Slight differences in texture, small pits,
irregular edges and open pores may occur and are consistent with the intended antique appearance.

IMPORTANT: DO NOT ACID CLEAN	**Never use acid-based grout haze removers, acid washes, vinegar, citrus cleaners, muriatic/hydrochloric acid, phosphoric acid, sulfamic acid, lime-scale removers or other acidic products. Acid can chemically attack limestone and permanently alter or damage its surface.**

PRE-INSTALLATION INSPECTION & DRY LAYOUT

Before installation, dry-lay and arrange tiles from multiple cartons to review the full range of color, shading, texture and natural markings, and to achieve a
balanced overall appearance. If there are any concerns about the appearance or range of the material, contact MLW Surfaces before proceeding.
Claims relating to visible characteristics, color variation or appearance will not be accepted after installation.

SETTING MATERIALS & GROUT

Setting Material: Use a premium white polymer-modified setting mortar specifically approved by the mortar manufacturer for natural limestone and
appropriate for the tile size, substrate and application. For large-format stone, use a mortar rated for large and heavy tile (LHT).
Grout: A high-performance cementitious grout suitable for natural stone is recommended. Use caution with heavily pigmented grouts, which may lodge in
the open texture or affect the appearance of the stone. Epoxy grout should not be considered the default choice; if used, confirm suitability for natural
limestone and test first.

MOISTURE & TEMPORARY COLOR CHANGES

Limestone naturally darkens as it absorbs moisture. During installation, moisture from the thinset mortar may temporarily darken the stone or cause
uneven shading. Depending on stone density, mortar type, substrate conditions, temperature, humidity and ventilation, drying may take several days or
longer. Allow sufficient time for moisture to dissipate and the stone to return to its natural color before evaluating the final appearance or applying sealer. Follow the mortar manufacturer's curing instructions, and do not assume that the mortar is fully cured or the stone completely dry after 48 hours.

SEALING BEFORE GROUTING

Once the mortar has cured as required by its manufacturer and the stone is clean and completely dry, apply a high-quality penetrating/impregnating
sealer suitable for limestone, such as Aqua Mix Sealer's Choice Gold. Pre-sealing can help reduce grout pigment absorption and assist with grout
cleanup. Test on a spare tile or an inconspicuous area before full application. Follow the sealer manufacturer's application and drying instructions,
including requirements for new installations. Allow the sealer to dry for the specified time before grouting.

INSTALLATION & POST-INSTALLATION CLEANING

Orval Limestone must be installed using methods and products appropriate for natural limestone. Protect the stone during construction and prevent
mortar, grout, paint and other construction materials from remaining on the surface.

Grout Cleanup: Remove grout residue during installation using clean water, appropriate sponges and cleaning methods approved by the grout
manufacturer for natural limestone. Do not allow grout haze to cure with the expectation that it can later be removed with an acidic grout-haze remover.

Acidic grout cleaners must not be used on Orval Limestone.

- Do not acid wash to remove grout haze or construction residue.
- Do not assume a cleaner safe for porcelain or ceramic tile is safe for limestone.
- Use only products specifically identified by their manufacturer as suitable for limestone.
- Test grout, cleaners, sealers and treatments on spare material or an inconspicuous area before full application.

SEALING & ROUTINE CLEANING

Orval Limestone is porous and should be protected with a high-quality penetrating sealer recommended for limestone. Follow the sealer manufacturer's
instructions. The stone should be clean and sufficiently dry before sealing. Periodic resealing may be required depending on traffic, exposure and the
product used.

- Sweep, vacuum or dust-mop regularly to remove grit and abrasive particles.
- Clean with warm water and a pH-neutral cleaner formulated for natural stone/limestone.
- Use a soft mop, cloth or soft nylon brush; avoid aggressive pads and abrasive powders.
- Wipe spills promptly. Rinse when required and do not leave cleaning residue on the surface.

PRODUCTS TO AVOID:

PRODUCT	POTENTIAL EFFECT
Vinegar, lemon/citrus or acidic cleaners	Can etch and chemically attack limestone.
Acid grout-haze removers or acid washes	Can permanently alter the stone surface.
Muriatic, phosphoric or sulfamic acid products	Not appropriate for limestone.
Harsh alkaline/caustic or abrasive cleaners	May damage or alter the finish.
Unapproved topical coatings or treatments	May change appearance or interfere with moisture movement.

BEFORE USING ANY NEW PRODUCT

Always test first. Apply any cleaner, sealer, enhancer or maintenance product to a spare piece or small inconspicuous area and allow it to dry completely before treating the full installation.

Natural Stone Notice: Samples are representative only and cannot show the full range of natural variation. Proper installation, sealing and maintenance are essential to preserving appearance and performance.